Visual Radar, Phase II

Completed Technology Project (2017 - 2018)



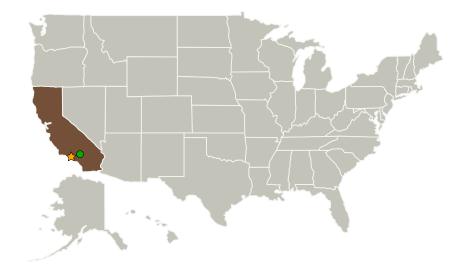
Project Introduction

To define sensor and terrain relative navigation (TRN) requirements for high speed motion at low altitudes (look-ahead distance, motion blur) and develop collaborative stereo technology for robust vision-based TRN.

Anticipated Benefits

This technology enables surface relative navigation and high resolution mapping of non-static environments (e.g. small bodies and asteroids). It also provides 3D perception for a future aircraft collision system.

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Туре	Location
	Lead	NASA	Pasadena,
	Organization	Center	California
Armstrong Flight Research Center(AFRC)	Supporting	NASA	Edwards,
	Organization	Center	California



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Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Jet Propulsion Laboratory (JPL)

Responsible Program:

Center Innovation Fund: JPL CIF



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Primary U.S. Work Locations

California

Project Management

Program Director:

Michael R Lapointe

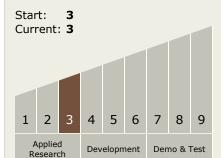
Program Manager:

Fred Y Hadaegh

Principal Investigator:

Roland Brockers

Technology Maturity (TRL)



Technology Areas

Primary:

- TX09 Entry, Descent, and Landing
 - └─ TX09.4 Vehicle Systems
 └─ TX09.4.7 Guidance,
 Navigation and Control
 (GN&C) for EDL

Target Destination

Others Inside the Solar System

